2014 Utah Department of Natural Resources

Annual Report for 2012-2013 and 2014 Directory of Services

"Moving Forward"



Cathedral Valley in Capitol Reef National Park Photographer: Gregg Beukelman, UGS

















Contents

Governor Herbert's Message

Executive Director Styler's Message

DNR Annual Employee Award Winners

Department Administration

Division of Forestry, Fire & State Lands

Division of Oil, Gas & Mining

Division of State Parks & Recreation

Division of Water Resources

Division of Water Rights

Division of Wildlife Resources

Utah Geological Survey



San Rafael Swell gypsum tour. Photo: UGS



GARY R. HERBERT

OFFICE OF THE GOVERNOR
SALT LAKE CITY, UTAH
84114-2220

GREG BELL LIEUTENANT GOVERNOR

Greetings,

As Governor, I am gratified the State of Utah is moving forward with accelerated momentum. Sustained job growth and increased economic investment, coupled with our productive workforce, has created one of the nation's strongest state economies.

Likewise, the Utah Department of Natural Resources (DNR) is moving forward. During the fiscal year 2012-13, this state agency achieved several successes:

- The watershed restoration project restored one million acres of land.
- Hundreds of pounds of carp were removed from Utah Lake in an effort to restore the clarity of the water and help the population of the native June sucker fish grow, thereby preventing it from being listed as an endangered species.
- Attendance at the state parks was robust with approximately 5 million visitors.
- Advance planning and fast action by forestry, fire, and state lands personnel helped reduce the amount of acreage destroyed by wildfires.

The agency's progress is commendable. In particular, I applaud DNR employees for continuing to provide excellent programs and public service. Indeed, DNR proves why Utah is recognized as one of the best-managed states and provides a solid example of how Utah is "Moving Forward."

Sincerely,

Hay N. Hubert
Gary R. Herbert



Executive Director's Message

For several years, the national and state economies have been struggling. Tight budgets have also been implemented at the Utah Department of Natural Resources (DNR). Neverthless, we have tried very hard to weather the economic woes without drastically cutting public services. We have been frugal in replacing employees who resigned or retired. Some programmatic changes and efficiencies have been instituted.

Despite the improvement in the economy, DNR is committed to the course of continued efficiencies and excellence in service. Now, the economy is turning the corner and so too, is DNR. For instance, DNR has adopted Governor Gary Herbert's goal to increase efficiencies by 25 percent over the next four years. We are going to improve our services and our "product". We are strategizing how we can expedite the issuance of permits with less customer effort. We are using more fuel efficient and hybrid cars in our fleet. All of our seven divisions have accepted the challenge.

We still recognize obstacles and search for new opportunities. Most importantly, we realize that our actions today will have long term benefits in the future. For instance, the time, money and effort put into rehabilitating watershed has resulted in fewer and less destructive wild fires. These healthy watersheds provide more yield of forage, clean water and habitats.

We will continue to look for innovative ideas. We will continue our excellent service to the public.



Michael R. Styler, DNR Executive Director

DNR Annual Employee Award Winners

Executive Director's Award

Jason Robinson, Division of Wildlife Resources

Jason was selected for taking on a challenging assignment

as the technical expert to the Governor's Sage Grouse Working Group. He quickly gained the trust of all and presented an unbiased approach and avoided advocacy positions and statements that might have alienated some members of the group.

He was often asked to evaluate recommendations or produce products within short time frames which meant long hours and working on weekends. Yet,



Jason never slacked in his regular duties as Upland Game Coordinator for DWR

Employee of the Year Jenny Zickgraff, Division of Wildlife Resources

Jenny is the office manager for DWR'S Central Region. She supervises the front office staff and is the 'go to' person for not only her coworkers, but also for other regional personnel, license vendors and the public.

Jenny has found creative solutions to problems such as:

- Creating a login system to track calls and status of dead dear on highways
- Entering bear bait station locations on Google Earth to minimize conficts among hunters and provide information for conservation officers to enforce bear baiting regulations
 - Simplifying onboarding of seasonal employees
- · Converting from paper to digital files
- · Revising janitorial and landscaping contracts



DNR Annual Employee Award Winners (cont.)

Leadership Award

Eric Edgely and Buck Ehler

Buck was instrumental in seeing the need for a department license for ESRI which saved thousands of dollars and enabled more people to utilize the system at the same time. He assisted with the implementation of the system with other divisions and



managed to complete his primary responsibilities and develop a GIS template that simplifies and expedites geologic map production.

Eric was selected to lead the ESRI contract for the department. Eric always smiled, even while working late or on weekends to meet project deadlines. He oversaw the Water Related Land Use Inventories, GIS specialties, cartography and drafting for the division. He and his staff have reduced the time by more than half to complete a river basin area inventory.

Community Outreach Award

Todd Prince State Parks and Recreation

Todd manages the Frontier Homestead State Park in Cedar

City. He often leads scenic and heritage tours for the tourism bureau, and facilitates field trips and in-class presentations for schools. Todd has collaborated with several university departments which led to internships and



historic restoration projects. Todd strives to increase visitation, revenue and resources at the park by offering quality, family friendly programming.

Utah Department of Natural Resources

1594 West North Temple, Suite 3710 PO Box 145610 Salt Lake City, Utah 84114-5610 801-538-7200 801-538-7315 (fax) www.naturalresources.utah.gov





L to R: Darin Bird, Kaelyn Anfinsen, Mike Styler, Tammy Kikuchi, Robyn Pearson

Executive Team

Michael Styler - Executive Director 801-538-7201 mikestyler@utah.gov

Darin Bird - Deputy Director 801-538-7201 darinbird@utah.gov

Robyn Pearson - Deputy Director 801-538-7201 robynpearson@utah.gov

Tammy Kikuchi - Communications Director/PIO 801-538-7326 tkikuchi@utah.gov

Kaelyn Anfinsen - Executive Assistant 801-538-7201 kaelynanfinsen@utah.gov

Administrative Team

Linda Beus - Human Resources Director 801-538-7319 lindabeus@utah.gov

Dennis Carver - Finance Director

801-538-7307 denniscarver@utah.gov

Sid Groll - Law Enforcement Director

801-538-4882 sidgroll@utah.gov

Henry Maddux - Species Recovery Program Director 801-538-7420 henrymaddux@utah.gov

Michael Casey - Interim Information Technology* 801-538-7244 mcasey@utah.gov

Alan Clark - Watershed Director* 801-538-4876 alanacla

301-538-4876 alangclark@utah.gov

Wade Kloos - GIS Director 801-538-7264 wkloos@utah.gov

*Alan Clark replaces Rory Reynolds who was promoted to the Division of Wildlife Resources

* Bill Boudreaux has been selected as the Information Technology Director.

801-538-7244



From L to R bottom row: Linda Beus, Alan Clark
From L to R top row: Dennis Carver, Wade Kloos, Sid Groll, Henry Maddux, Mike Casey

Organizational Chart Gary Herbert Governor Michael Styler Executive Director Darin Bird Robyn Pearson **Deputy Director Deputy Director Divisions Divisions** Utah Geological Survey Forestry, Fire & State Lands Water Resources Oil, Gas & Mining State Parks & Recreation Water Rights Wildlife Resources Administration Community Outreach Administration Congressional Liaison **Human Resources** Legislative Team Public Information Recovery Program **Technology Services** Sidney Groll Dennis Carver Law Enforcement

Department Goals

Finance Director

Customer Service - Provide quality customer service

Director

Building the Bench - Develop an active plan of recruitment to compete for quality employees and in preparation for replacing key employees as they retire

Elimination of Silos - Increase organizational efficiency and effectiveness by sharing assets and resources across organizational lines

Enhance Revenues and Reduce Costs - Focus on the use of department assets to reduce reliance upon the general fund

2012-2013 Highlights

Endangered Species Mitigation Fund

- The restoration of Utah Lake continued with the removal of 3.4 million pounds of carp.
- Working with local, state and technical officials, the Coral Pink Sand Dunes Tiger Beetle conservation agreement was updated in order to avoid the listing of this species.
- The restoration of Hobble Creek was successful in producing young endangered June Suckers, the first the lake has seen in many years.
- The Virgin River Pumpback system was fully operational resulting in reducing water temperatures for woundfin from their lethal limit back to their normal range for 1000 hours.
- Achieved restoration of Virgin Spinedace to 89% of their historic range, surpassing our goal of 80%.



Coral Pink Sand Dune Tiger Beetle

- Drafted an updated Virgin River Resource Management and Recovery Program Document to better reflect current program management.
- Completed Parowan Airport Fence and Paragonah Cemetery fence. These fences were built as barriers to protect those areas from impacts associated with Utah prairie dogs.



Prairie doas

2012-2013 Highlights (cont.)

Watershed

Utah's Watershed Restoration Initiative (WRI) had an extremely busy year in FY 2013. In addition to completing most of the planned projects, Utah had one of its worst wildfire years in the first half of the fiscal year and a number of fire rehabilitation projects were added to the approved project list from a supplemental appropriation provided by the Legislature.

- 194 projects were reviewed by regional teams, recommended for funding, and then approved for funding in FY2013 and 60 approved projects were carried over from FY2012. Regular projects for FY2013 proposed to treat more than 150,000 acres and 150 miles of stream. The toal budget for these projects is almost \$30 million. Reports for completed projects are due in October and will be available for viewing on the WRI database (wri.utah.gov).
- More than 700,000 acres burned in wildfires in Utah during the summer of 2012. The WRI partners identified more than 100,000 of the highest priority acres for rehabilitation and with support from the Legislature purchased seed and completed these rehabilitation projects in addition to the projects described in the first bullet. Total funding for fire rehabilitation by all partners exceeded \$17.5 million.
- The WRI planned and carried out a training workshop for partners in the initiative with more than 120 attendees.
- In December, Rory Reynolds, founding Director of the WRI program, took a new position within a DNR agency and was replaced by Alan Clark.
- Regional Teams reviewed and recommended funding for more than 120 projects FY 2014 with an increased emphasis on wildfire pre-suppression and restoring and enhancing Greater Sage-grouse habitat.
- Work began in FY 2013 to develop performance measures for the WRI Program that better track the public benefits provided by its completed project.

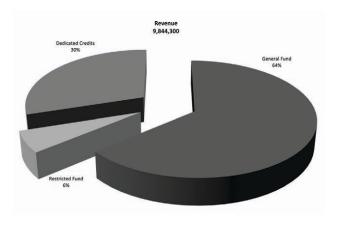


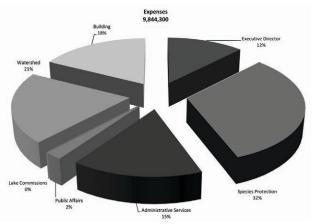
Black Mountain rehabiliation success story

Financials

Fiscal Year Ending June 30, 2013

(Unaudited)





Utah Division of Forestry, Fire & State Lands (FFSL)



Mission Statement

"The Division of Forestry, Fire & State Lands manages, sustains and strengthens Utah's forests, rangelands, sovereign lands and watersheds for its citizens and visitors."



A division fire crew heads in for a hot meal after camping on an Idaho fire line for two weeks.

Utah Division of Forestry, Fire & State Lands

1594 West North Temple, Suite 3520 PO Box 145703 Salt Lake City, Utah 84117-5703 801-538-5555 801-533-4111 (fax) www.ffsl.utah.gov



L to R: Dick Buehler, Jason Curry, Brian Cottam, Nicole Dennison, Roger Lewis

Executive Team

Dick Buehler - State Forester / Director 801-538-5389 dickbuehler@utah.gov

Brian Cottam - Deputy Director 801-538-5504 briancottam@utah.gov

Roger Lewis - Financial Manager 801-537-3206 rogerlewis@utah.gov

Jason Curry - Fire Information Officer/Investigator 801-538-5324 jasoncurry@utah.gov

Nicole Dennison - Administrative Secretary 801-538-5418 nicoledennison@utah.gov

Division Director's Message

The staff of the Division of Forestry, Fire & State Lands continues to be creative, forward thinking, innovative and proactive in managing and implementing the programs administered by the agency. While some division programs are more visible than others, such as wildland fire suppression, other programs play an important role in protecting and enhancing Utah's natural resources.



Fire related programs contribute to protecting life and property and our natural resources though fuel mitigation, prevention and presuppression. Forestry programs assist private landowners to responsibility manage their forested lands to meet the objectives established by individual landowners. The sovereign lands program manages, protects and enhances Utah's navigable lakes, rivers and other lands to benefit the public and associated resources.

Through the efforts of highly qualified and committed staff, the Division is well positioned to move forward into the future. Their efforts and foresight will not only meet the mandate of administering its critical programs but create new and innovative ways to do so.

Dick Buehler, State Forester, Division Director

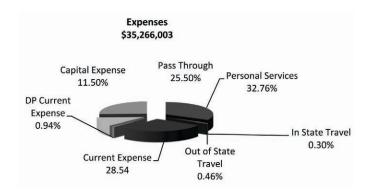


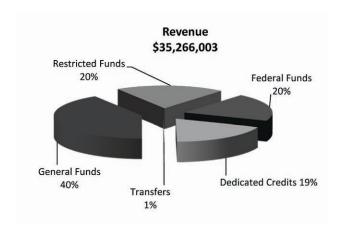
A fire crew lookout watches over fellow firefighters on a wildfire in Carbon County.

Financials

Fiscal Year Ending June 30, 2013

(Unaudited)







An arborist takes in a tree-falling lesson from a wildland firefighter at a class for urban foresters

2012-2013 Highlights

- Normal to above normal fire activity was expected for 2013. More
 precipitation in June and July held off the fire season which was
 beginning to peak at the end of June. At the end of FY12/13 state
 fire crews were working on fuel reduction projects in the state and
 fighting wildfires in New Mexico, Arizona and Colorado.
- Division staff took advantage of the milder season and completed 61 fuel reduction projects in Wildland Urban Interface (WUI) areas throughout the state. This fiscal year, hazardous fuels were mitigated on 2,400 additional acres around the state.
- Five new Community Wildfire Protection Plans (CWPPs) were completed. More than 30% of the state's communities are covered by a CWPP.
- In late June, there was only one type 2 wildfire incident (Lackey Fan in San Juan County). Last June, there were 6 throughout the state.
- The Division trained 2,620 basic and advanced firefighters.
- The Division distributed \$64,700 in grants to Utah communities for urban forestry projects including tree planting, arborist training, public awareness campaign and hazard tree mitigation; these grants leveraged over \$120,900 in matching contributions.
- 82 Utah communities were recognized as a Tree City USA; 4 new Tree City USA's were acknowledged.



Heavy brush being lifted out of a canyon below a Sandy neighborhood as part of a hazardous fuel reduction project .

- Through outreach efforts with local partners (TreeUtah, Utah Community Forest Council and Utah Society for Environmental Education) FFSL has effectively reached a broad audience, providing critical forestry support and technical assistance for the forest resource that surrounds more than 80% of the state's population.
- The Great Salt Lake Comprehensive Management Plan and Mineral Leasing Plan were completed in March. These documents guide how the lake and its resources are managed. Plan amendments are in progress on the Utah Lake Comprehensive Management Plan and the Bear Lake Comprehensive Management Plan.
- Forest Stewardship Plans were completed for 6 properties totaling 15,771 acres in Grand, Wasatch, Rich, Cache and Iron counties.
- Through partnerships with other state and local agencies the Division has continued to actively address invasive species control on sovereign lands, focusing increased efforts on Phragmites control on Utah Lake and Great Salt Lake.
- A survey of existing uses on, over and along the Jordan River was completed in preparation for undertaking a comprehensive management planning process in FY2015.

2012-2013 Highlights (cont.)

- Utah's Forest Legacy Program successfully completed the 5,574acre Green Canyon Ranch Conservation Easement in Cache County. Partnerships with the Utah Quality Growth Commissioner LeRay McAllister Fund, U.S. Fish and Wildlife Service, Utah Department of Environmental Quality and the Utah Division of Wildlife Resources were paramount in the completion of the project. Total Forest Legacy acres - 71,357.
- State Forester's Awards were given to Jason Barto (Uinta Headwaters RC&D) for Forest Stewardship Achievement and Marcia White, Grege Larsen and Pam Phillips (Uinta/Manor Lands-Family property in Summit County) for Forest Landowner of the Year.The Division is currently digitizing metes and bounds descriptions of more than 1,800 leases to prepare for a new digital land lease database.



A volunteer removes trash during a cleanup project on sovereign land at Utah Lake

Services and Functions

Sovereign Lands

Administers private, public and commercial uses of state owned lakebed and riverbed lands in accordance with the public trust doctrine.

Forest Stewardship/Agro Forestry

Assists private landholders in managing resources. Services include developing management plans along with timber marking, windbreaks, water quality, wildlife habitat improvement and financial assistance to implement resource management plans.

Urban and Community Forestry

Urban foresters provide technical and financial assistance to cities and towns for tree management and plantings. Promote the benefits of trees in all Utah communities.

Wildland Fire Protection

Provides wildland fire prevention and protection on Utah's unincorporated private lands and state lands. Includes wildland fire suppression training and fire equipment grants to community and volunteer fire departments.

Lone Peak Conservation Center

Provides trained crews to fight wildland fires, complete natural resource projects and work on conservation projects.

Regional Offices

Northeastern Area Mike Eriksson, Area Manager 2210 S. Highway 40, Suite B Heber City, UT 84302 435-781-5463 mikeeriksson@utah.gov

Central Area Marvin Turner, Area Manager 1139 North Centennial Park Drive Richfield, UT 84701 435-896-5697

Southwestern Area Ron Wilson, Area Manager 585 North Main Street Cedar City, UT 84720-2643 435-586-4408 ronwilson@utah.gov

Southeastern Area Jason Johnson, Area Manager 1165 South Highway 191, Suite 6 Moab, UT 84532-3002 435-259-3762 jasonjohnson@utah.gov

Wasatch Front Area
Trent Bristol, Area Manager
1594 West North Temple, Suite 3520
PO Box 145703
Salt Lake City, UT 84114-5703
801-538-5351
trentbristol@utah.gov

Bear River Area
Blain Hamp, Area Manager
1780 North Research Park Way, Suite 104
North Logan, UT 84341-1940
435-752-8701
blainhamp@utah.gov

Lone Peak Conservation Center Gary Peck, Coordinator Fire Service Center 271 Bitterbrush Lane Draper, UT 84020-9599 801-571-0900 garypeck@utah.gov

Utah Division of Oil, Gas & Mining (DOGM)



Mission Statement

"Division of Oil, Gas and Mining regulates and ensures industry compliance and site restoration while facilitating oil, gas and mining activities."



Coal Program Environmental Scientist taking water sample at White Oak reclaimed mine site. Photo by Priscilla Burton

Utah Division of Oil, Gas & Mining

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (fax) www.ogm.utah.gov



L to R: Jim Springer, Dana Dean, John Rogers, Paula Dupin-Zahn, Steve Schneider, Luci Malin, John Baza, Julie Ann Carter

Executive Team

John R. Baza - Director 801-538-5334 johnbaza@utah.gov

Dana Dean - Associate Director for Mining 801-538-5320 danadean@utah.gov

John Rogers - Associate Director for Oil and Gas 801-538-5349 johnrogers@utah.gov

Steve Schneider - Legislative Liaison 801-538-5238 steveschneider@utah.gov

Luci Malin - Administrator, AMRP 801-538-5323 luciamalin@utah.gov

Jim Springer - Information Specialist 801-538-5324 jimspringer@utah.gov

Paula Dupin-Zahn - Finance Manager 801-538-5309 pauladupinzahn@utah.gov

Earlene Russell - Administrative Secretary (not pictured) 801-538-5336 earlenerussell@utah.gov

Julie Ann Carter - Board Secretary 801-538-5277 juliecarter@utah.gov

Division Director's Message

We tend to take things for granted. We flip a switch and our lights come on. We hop in our cars and run to the store. We sit at our computers and instantly connect to the world. Rarely do we stop and take a moment to ponder the wonder of it all. We live in an age only dreamed of a few short generations ago. Yet, few of these wonders would exist were it not for the raw materials developed from the



earth. The conveniences of our modern world would not exist without the minerals and petroleum resources that are used to produce them. The mission of the Division of Oil, Gas and Mining is to facilitate the development of these natural resources in an environmentally responsible manner. The division staff, from petroleum engineers to environmental scientists, strives each day to ensure we accomplish that mission, and by doing so ensure we continue to enjoy the standard of living we've come to expect.

John R. Baza - Director



Energy company conducting geologic testing in search of natural gas and petroleum.

Photo by Ted Smith



Members of the Board of Oil, Gas and Mining tour a copper mine in southeastern Utah

Board of Oil, Gas & Mining

Ruland J. Gill, Jr., Chair Oil and Gas, Salt Lake City

Kelly L. Payne Mining, Salt Lake City

Susan S. Davis Oil and Gas, Salt Lake City

Carl R. Kendell Geology, Salt Lake City

Michael R. Brown Ecology and Environment, Salt Lake City

Chris D. Hansen Mining, Highland

Julie Ann Carter, Board Secretary 801-538-5277

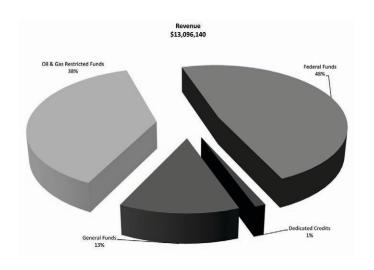
Regional Offices

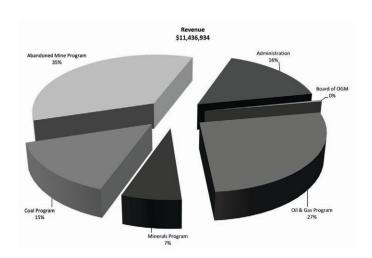
Price Field Office Karl Housekeeper 319 N Carbonville Road, Suite C Price, UT 84501 435-613-3737 / 435-613-3739 (fax) karlhousekeeper@utah.gov

> Vernal Office Dave Hackford 318 North Vernal Avenue Vernal, UT 84078-2126 435-247-1539 davehackford@utah.gov

Financials

Fiscal Year Ending June 30, 2013 (Unaudited)





Excess of Revenue Over Expenditures

Nonlapsing	\$1,651,119
Lapsing to General Fund	\$0
Lapsing to Restricted Fund	\$8,087
Total	\$1,659,206

2012-2013 Highlights

Oil and Gas Program

Activity in Utah's oil and gas fields continues to increase. Complete figures for FY2013 are not available, but there

has been a seven percent increase in the number of Applications to Drill (APD) over FY2012. **APDs in 2013** numbered 2039 so far. The number of wells actually drilled declined a bit from 1.003 to just over 800 in FY2013. However. production volumes of both oil and natural gas



Oil and natural gas production continue to increase in Utah thanks to the use of new technologies.

continue to increase. In FY2013, oil production jumped to more than 30.1 million barrels. This is the highest crude oil production since 1988. Natural gas produced in FY2013 increased to more than 490 million cubic feet, the highest natural gas production in Utah history. The trend in coalbed methane production continued downward from more than 50 million cubic feet in FY2012 to 2013's figure of just over 45 million cubic feet. There are almost 11,200 producing wells in Utah. Inspectors from the division completed about 9,000 well inspections of various types.

Coal Program

During the fiscal year Coal Program staff oversaw 36 permitted coal sites: Twelve active mines (eight of which are mining new coal and four are mining coal fines or refuse piles), three active processing plants, five reclaimed mines, five mines in temporary cessation, two mines and two loadouts in inactive status, six bond forfeiture sites and one exploration well site.

Staff processed 88 amendments of which 42 were approved. renewed three permits. conducted three midterm reviews and completed



Operations underway at Coal Hollow, Utah's only surface coal mine

363 inspections and technical visits. Eleven violations were issued during mine inspections. No new mine applications were received during the year.

2012-2013 Highlights (cont.)

Minerals

In general, the mining industry continues to struggle along with the rest of the economy. Commercial scale production from oil shale and oil sands appears to be close on the horizon but has not yet begun. Meanwhile, production of other commodities remains fairly constant. Permitting activity is continuing, apparently in anticipation of increased

production in the future. The Minerals Regulatory Program oversaw 656 mineral mine sites and completed 539 permitting actions and 393 inspections during the fiscal year.



Teachers throughout the state are learning how to use "Utah Geology for Utah Kids - Science That Rocks!" to improve 4th grade science education in Utah, part of the divisions's Mineral and Petroleum Literacy Program.

Seven enforcement actions were taken during that time. The program currently administers about 559 reclamation sureties totaling more than \$140 million.

Abandoned Mine Reclamation

Utah's Abandoned Mine Reclamation Program is charged with

identifying hazardous abandoned mines and sealing them from public entry. The program also conducts cultural and historical documentation of how



An estimated 15,000 abandoned mines remain scattered throughout Utah.

mines, now

abandoned, contributed to Utah's history and economic development along with detailed analysis of the environmental impacts of abandoned mine reclamation work. During FY2013, mines were closed in Carbon, Sanpete, Sevier, Uintah and Washington counties.

Ongoing "Stay Out and Stay Alive" outreach efforts included participating in 24 public events, distributing a "Mining Utah's Heritage" workbook to each 4th grader in Utah and designing and printing a calendar featuring historically important mines.

2012-2013 Highlights (cont.)

The division also conducted an Earth Day poster contest on the theme "Where Would We Be Without Oil, Gas & Mining?" Students in grades K-6 participated. The student who created the winning poster was from Neola Elementary in Duchesne County.

Board of Oil, Gas and Mining

The Board of Oil, Gas and Mining presented 2013 Earth Day Awards to four companies who exceeded regulatory requirements while developing Utah's natural resources.



Neola Elementary students are treated to a science demonstration and lunch

Awards were presented to: Anadarko Petroleum Corp., Newfield Exploration Co., and Canyon Fuel Company's Skyline and Sufco mines.

Services and Functions

Oil and Gas Program

Permits, inspects and monitors oil and gas wells throughout the state. Also, collects, processes, audits and maintains information on ownership, production, disposition and status of oil and gas exploration and production wells and facilities.

Coal and Mineral Permitting

Issues permits to coal and mineral mining operations to ensure their compliance with surface environmental laws and regulations.

Injection Wells and Disposal Facilities

Permits and inspects injection and disposal wells and surface water disposal pits. Water is forced into injection wells to aid recovery of additional oil assets. Disposal wells are usually depleted wells and used to store unusable water underground. The division enforces regulations concerning disposal of produced water and wastes from oil and gas exploration and production.

Appeals

Provides first level of administrative appeal to public on minerals, coal and oil and gas projects when there are objections.

Abandoned Mine Reclamation

Protects public health, safety and environment from unpermitted abandoned mine problems. Provides information to schools on hazards of abandoned mines.

Utah Division of State Parks & Recreation (USPR)



Mission Statement:

"Division of State Parks and Recreation preserves and provides natural, cultural and recreational resources for the enjoyment, education and inspiration of this and future generations."



New cabins at Starvation State Park provide visitors camping alternatives.

Utah Division of State Parks and Recreation

1594 West North Temple, Suite 116 PO Box 146001 Salt Lake City, UT 84114-6001 801-538-7220 801-538-7378 (fax) www.stateparks.utah.gov

L to R: Jeff Rasmussen, Scott Strong, Wendy Wack, Eugene Swalberg, Fred Hayes



Executive Team

Fred Hayes – Director 801-538-7336

fredhayes@utah.gov

Jeff Rasmussen - Deputy Director

801-538-7323 jeffrasmussen@utah.gov

Scott Strong – Finance Manager 801-664-1381 scottstrong@utah.gov

Eugene Swalberg – Communications/Marketing 801-538-7347 eugeneswalberg@utah.gov

Wendy Wack – Administrative Assistant 801-538-7418 wendywack@utah.gov

Division Director's Message

Following several years of hard work restructuring Utah State Parks, this past year has been full of tremendous progress. I am extremely proud of our agency employees who have confronted challenges and have emerged as winners.

Parks administration asked staff to focus on the concept of MORE- identifying ways to get MORE people, having MORE fun, in MORE parks, MORE often. Our park and program managers and their respective staffs moved forward with innovative programming at virtually every park. Recreation opportunities were developed to enrich the lives of record numbers of visitors. Staff moved forward with a renewed entrepreneurial spirit working tirelessly to reduce the Division's dependence on general tax revenues by creating profit generating partnerships with private enterprise.

We have moved forward this year in our ability to curate and care for priceless artifacts from Utah's past through the cooperative development of a world class curatorial facility at the Utah Field House of Natural History State Park Museum. This facility, made possible through the generosity of Uintah County and the Uinta Special Service Impact Mitigation Board, will house fossils and other prehistoric specimens uncovered as a result of mineral exploration activity in the Uinta Basin.

We will continue to move forward with many great adventures lying ahead.

- Fred Hayes, Director



BOARD OF UTAH STATE PARKS

Irene Hansen, Chair Uintah, Daggett and Duchesne counties

Marty Ott, Vice Chair Kane, Garfield, Piute, Sevier, Sanpete and Wayne counties

Eli Anderson
Box Elder, Cache and Rich counties

Lois Bulloch
Beaver, Iron and Washington counties

Jaren Davis State-at-Large

Tom Guinney
Salt Lake, Tooele and Summit counties

Glenn Greenhalgh Utah, Juab, Wasatch and Millard counties

Joseph Hull Davis, Morgan and Weber counties

Kimberly Schappert Emery, Carbon, Grand and San Juan counties

> Wendy Wack Administrative Assistant 801-538-7418

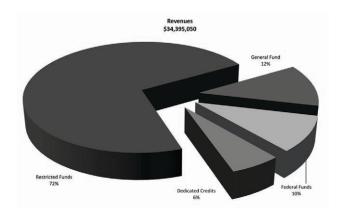


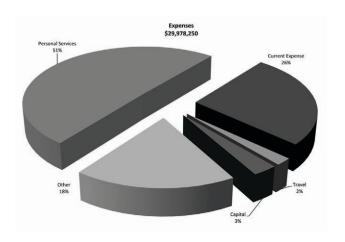
Utah State Parks and Recreation board members are sworn in at the Department of Natural Resources.

Financials

Fiscal Year Ending June 30, 2013

(Unaudited)





2012-2013 Highlights

Created by the 1957 Utah Legislature, Utah State Parks and Recreation attracts almost 5 million visitors each year. Utah's 43 state parks and museums generate tourism revenue for our state and local economies, and are vital to our quality of life as destinations of beauty, natural wonder, history and culture. Utah's state park system is a priceless and irreplaceable legacy.

- Increased park revenue by \$338,688 from fiscal year 2012 to 2013 to through innovative entrepreneurial strategies.
- More than 60 privately owned businesses operate at over 25 different parks. Private partnerships generated park revenues in excess of \$500,000 in fiscal year 2013.
- Generated more than \$448,000 in revenue from non-resident off-highway vehicle permits.
- Continued partnership with the Bureau of Reclamation and completed phase two of new day-use and camping facilities at Starvation State Park.
- Celebrated the opening of the new 11,500-squarefoot curatorial facility at the Utah Field House of Natural History State Park Museum built with funds by Uintah County.
- Continued expansion of trails and new educational exhibits at Dead Horse Point State Park made possible by donations from mining and oil companies.
- Hosted the Fire On The Water event at Jordanelle State Park that generated \$2,000 in additional park revenue, welcomed 1,500 additional park visitors and developed community partnerships.
- Continued clean up efforts from the Chevron diesel fuel spill at Willard Bay State Park. Park improvements from Chevron include wildlife habitat, restoration of nature trails and new dayuse and overflow parking.
- Provided 1,518 education programs in state parks and museums attended by more than 122,000 visitors, 65,000 of whom were children.
- Committed to the safety of all off-highway vehicle (OHV) riders, the Utah OHV education program certified 3,200 Utah children over the past year.

2012-2013 Highlights (cont.)

- Implemented the Ride On Utah designated route statewide messaging campaign strategic plan including billboards, trailhead posters, and trail markers.
- Developed a private/public partnership promoting an OHV Border to Border ride covering over 50,000 miles of OHV routes from Utah/Idaho border to the Utah/Arizona border.
- Provided over \$225,000 in OHV capitol development funds for OHV facilities including restrooms, kiosks, and trailhead development.
- Assisted in implementing two major OHV trail connectors: Spanish Fork Canyon to the Utah-Arizona state line and Fairview Canyon to Scofield State Park.
- Groomed and maintained more than 25,000 miles of snowmobile trails on 13 snowmobile complexes during the winter season.
- Certified more than 900 Utah children through the Utah's boating education program.
- Committed to public safety and resource protection, Utah park rangers assisted with 163 search and rescue operations, 382 medicals, 411 vessel assists and encountered 4,953 violations.



History camps at Camp Floyd Stagecoach State Park and Museum are one of many popular programs held every year.

Services and Functions

Operations

Manages Utah's state park system, which includes operations, planning, and protection of 43 heritage, scenic and recreation parks.

Planning

Guides short and long-term site management to protect and interpret each park's natural and cultural resource base, ensure safe and enjoyable visitor experiences, provide for new visitor opportunities and develop and enhance facilities to meet visitor needs.

State Boating Act

Administers the State Boating Act on Utah waters, which includes safety, education, search and rescue, and enforcement.

Off-Highway Vehicles

Administers summer and winter off-highway vehicle programs, including education, trail maintenance, grant programs, user compliance, accident investigation, and search and rescue.

State Trails Program

Protects, interprets, develops and maintains recreational trail resources within state parks, and provides coordination, funding and technical assistance on statewide trail projects.

Grant Programs

Administers Land and Water Conservation Fund, non-motorized and motorized trails grant programs.

Regional Offices

North Region
Dave Harris, Region Manager
1084 North Redwood Road
Salt Lake City, UT 84116-1555
801-533-5127

Southeast Region Tim Smith, Region Manager 1165 South Highway 191, Ste.7 Moab, UT 84532-3062 435-259-3750

Southwest Region Wayne Monroe, Region Manager 585 North Main Street Cedar City, UT 84720-2643 435-586-4497

State Parks and Museums

Anasazi State Park Museum Mike Nelson, Park Manager 435-335-7308

Antelope Island State Park Jeremy Shaw, Park Manager 801-773-2941



Curatorial facility at the Utah Field House of Natural History State Park Museum

Bear Lake State Park Richard Droesbeke, Park Manager 435-946-3343

Camp Floyd/Stagecoach Inn State Park and Museum Mark Trotter, Park Manager 801-768-8932

Coral Pink Sand Dunes State Park Michael Franklin, Park Manager 435-648-2800

Dead Horse Point State Park Megan Blackwelder, Park Manager 435-259-2614

Deer Creek State Park Dawn Larsen, Park Manager 435-654-0171

East Canyon State Park James Lowe, Park Manager 801-829-6866

State Parks and Museums (cont.)

Edge of the Cedars State Park Museum Teri Paul, Park Manager 435-678-2238

Escalante Petrified Forest State Park Kendall Farnsworth, Park Manager 435-826-4466

Flight Park State Recreation Area Eric Stucki, Park Manager 801-533-5127

Fremont Indian State Park & Museum Bob Hanover, Park Manager 435-527-4631

Frontier Homestead State Park Museum Todd Prince, Park Manager 435-586-9290

Goblin Valley State Park Sarah Siefken, Park Manager 435-564-3633

Goosenecks State Park Teri Paul, Park Manager 435-678-2238

Great Salt Lake State Marina Jeremy Shaw, Park Manager 801-250-1898

Green River State Park Sarah Siefken, Park Manager 435-564-3633

Gunlock State Park Laura Melling, Park Manager 435-628-2255

Historic Union Pacific Rail Trail State Park Mountain Trails Foundation 435-649-6839

Huntington State Park Jonathan Hunt, Park Manager 435-687-2491

Hyrum State Park Chris Haramoto, Park Manager 435-245-6866

State Parks and Museums (cont.)

Jordan River OHV State Recreation Area David Wagner, Park Manager 801-533-5424

Jordanelle State Park Laurie Backus, Park Manager 435-649-9540

Kodachrome Basin State Park Aaron Farmer, Park Manager 435-679-8562



Improving off-highway vehicle trail markers on the Dry creek Trail in Hurricane to encourage rider responsibility and safety.

Millsite State Park Jonathan Hunt, Park Manager 435-687-2491

Otter Creek State Park Bob Hanover, Park Manager 435-624-3268

Palisade State Park Shon Tripp, Park Manager 435-835-7275

Piute State Park Bob Hanover, Park Manager 435-624-3268

Quail Creek State Park Jon Wikan, Park Manager 435-879-2378

Red Fleet State Park Mike Murray, Park Manager 435-789-4432

State Parks and Museums (cont.)

Rockport State Park Joseph Donnell, Park Manager 435-336-2241

Sand Hollow State Park Laura Melling, Park Manager 435-680-0715

Scofield State Park Jonathan Hunt, Park Manager 435-448-9449

Snow Canyon State Park Kristen Comella, Park Manager 435-628-2255

Starvation State Park Mike Murray, Park Manager 435-738-2326

Steinaker State Park Mike Murray, Park Manager 435-789-4432

Territorial Statehouse State Park Museum Carl Camp, Park Manager 435-743-5316

This Is The Place Heritage Park Private Foundation Director 801-582-1847

Utah Field House of Natural History State Park Museum Steve Sroka, Park Manager 435-789-3799

Utah Lake State Park Jason Allen, Park Manager 801-375-0731

Wasatch Mountain State Park Bruce Strom, Park Manager 435-654-1791

Willard Bay State Park James Morgan, Park Manager 435-734-9494

Yuba State Park Cheston Slater, Park Manager 435-758-2611

Utah Division of Water Resources (UDWRe)



Mission Statement:

"Division of Water Resources plans, conserves, develops and protects Utah's water resources."



Construction of a water storage tank

Utah Division of Water Resources

1594 W. North Temple, Suite 310 PO Box 146201 Salt Lake City, UT 84114-6201 801-538-7230 801-538-7279 (fax) www.water.utah.gov



L to R: Todd Adams, Eric Millis, Dennis Strong, Barbara Allen, Jim Egbert

Executive Team

Dennis J. Strong - Director 801-538-7250 dennisstrong@utah.gov

Eric L. Millis - Deputy Director 801-538-7298 ericmillis@utah.gov

Todd D. Adams - Assistant Director 801-538-7272 toddadams@utah.gov

Barbara Allen - Administrative Secretary 801-538-7235 barbaraallen@utah.gov

Jim Egbert - Budget Officer 801-538-7257 jimegbert@utah.gov

Division Director's Message

Moving is always a good thing and usually moving forward is even better. This past period of time has been fraught with challenges for all of us and has been especially challenging for water users. The drought continues. In 2000 we entered a drought that has continued for 13 years, with the last two years being the driest two consecutive years in the water-gaged history on the Colorado River; we continue to set records we do not want to set. Yet, as we look forward,



Lake Powell is still almost half full and Utah water users are heeding the call to conserve water and we will move forward with hope.

Moving forward is especially poignant to me as I end a 38-year career with the Division of Water Resources. As I move forward I also want to look backward. Recently I purchased a car that has a backup camera. When I put the car in reverse I can see both forward and backward, which is useful so I can get going in the right direction when I shift into drive and go forward. Moving forward the camera showing the rear of the vehicle turns off. I wish it did not. It seems to me that as we move forward there are things behind us that can help us stay the course. Lessons learned in the past can help us move forward with greater wisdom and knowledge if we remember them.

As we move forward past difficult times into difficult times I have hope because we have good people engaged in the process. We have people that are well trained, have experience, and care about the future of Utah's water resources. And we are moving forward with a plan. Water conservation will supply more than half of the water needed to support the growth that is projected for the next fifty years. Better management of the water we are currently using and moving water from irrigated farm ground as it is replaced with houses will also help meet future demand. But if we are to continue the lifestyle and landscape practice we enjoy today we will need to develop additional water from the Bear and Colorado rivers. Moving forward to meet the need for additional water for growth will require wisdom, compromise, innovation, and a lot of money.

- Dennis Strong, Division Director

Board of Water Resources

J. Stewart Paulick, Chair Salt Lake, Tooele counties

David S. Humphreys, Vice-Chair Weber, Davis, Morgan, Summit counties

Craig E. Johansen Carbon, Emery, Grand, San Juan counties

> Blair R. Francis Box Elder, Cache, Rich counties

Steve Farrell Utah, Juab, Wasatch counties

N. Gawain Snow Daggett, Duchesne, Uintah counties

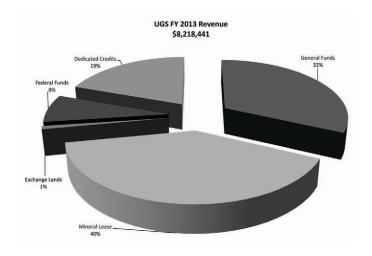
James A. Lemmon Beaver, Garfield, Iron, Washington, Kane counties

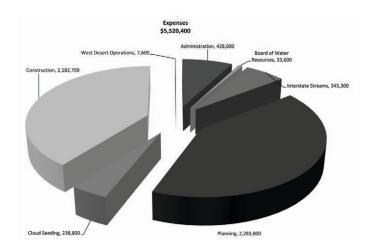
Robert D. Bessey
Millard, Sanpete, Sevier, Piute, Wayne counties
Weber, Davis, Morgan, Summit counties

Financials

Fiscal Year Ending June 30, 2013

(Unaudited)





2012-2013 Highlights

- Continued preconstruction activities on the Lake Powell Pipeline and Bear River Development projects.
- The Board of Water Resources (Board) loaned \$21.1 million for 19 water projects.
- The Board granted \$2,000,000 for four dam safety compliance projects.
- Published two special studies: "Utah Cloud Seeding Program Increased Runoff/Cost Analysis" and "The Utah Water Conservation Plan Act of 1999: Monitoring the Effectiveness of Water Conservation Plans".
- Collected water-related land use data for the West Desert and Uintah basins. Published the land use inventory studies for the Southeast and West Colorado River basins.
- Worked with the Emery County Public Lands Council and the Natural Resources Conservation Service to study the water resources of the San Rafael River and Muddy Creek watersheds. This study looked at the availability of water resources and determined if and how water might be available to enhance existing water users' supply, as well as at downstream environmental needs.
- The Colorado River Basin States, U.S. State
 Department, International Boundary & Water
 Commission, and the Country of Mexico met to discuss
 expanding cooperative management of the Colorado
 River to include uses in Mexico a historic effort that
 has major and long-term impacts for both countries.



Services and Functions

Development and Conservation Funds

The Board of Water Resources administers three state water development and conservation funds.

Technical Assistance

The Division (DWRe) provides technical water development and planning assistance to Utah water users.

Water Planning

DWRe maintains the State Water Plan, which describes Utah's current and long-term water related needs, inventories municipal and industrial water use and water-related land use, and performs water use studies.

Computer Applications

DWRe develops Geographic Information System applications, water demand/supply, and hydrologic models.

Interstate Streams

The director is Utah's interstate streams commissioner, helping defend and protect Utah's right to develop and use its entitlements in the Colorado, Bear, and Columbia rivers.

Cloud Seeding

DWRe promotes cloud seeding to augment natural snow pack.

Water Education/Conservation

DWRe is working with local water agencies, individuals, and professional groups to develop and implement water conservation programs to reduce per capita water use in Utah by at least 25 percent before 2025. It develops and distributes water education instructional materials to teachers and students in Utah's public schools.



Red Butte Dam construction

Utah Division of Water Rights (DWRi)



Mission Statement:

"Division of Water Rights promotes order and certainty in administering the beneficial use of Utah's water."



"Just a Ducky Day" Silver Lake/ Big Cottonwood Canyon Photo by Kelly Horne

Utah Division of Water Rights

1594 W. North Temple, Suite 220 PO Box 146300 Salt Lake City, UT 84114-6300 801-538-7240 801-538-7467 (fax) www.waterrights.utah.gov



L to R: John Mann, Jared Manning Kent Jones, Marianne Burbidge, Dave Marble, Boyd Clayton, James Greer

Executive Team

Kent Jones - State Engineer/Director 801-538-7371 kentljones@utah.gov

Boyd Clayton - Deputy State Engineer 801-538-7390 boydclayton@utah.gov

Jared Manning - Assistant State Engineer/Field Services 801-538-7380 jaredmanning@utah.gov

John Mann - Assistant State Engineer/Applications & Records johnmann@utah.gov

David Marble - Assistant State Engineer/Dam Safety 801-538-7376 davemarble@utah.gov

James Greer - Assistant State Engineer/Technical Services 801-538-7481 jamesgreer@utah.gov

Marianne Burbidge - Admin. Secretary/Legislative Liaison 801-538-7370 marianneburbidge@utah.gov

Division Director's Message

Moving Forward!

So there I was in a heated discussion about how to properly divide a small amount of water between six different irrigation companies. The amount of water available was barely enough for even one company to get by, let alone six companies! After several lengthy meetings, decisions were made on how best to share that limited resource. Although no one seemed to be happy about it, everyone was trying to make the best of having so little resource to work with. Then, I drive 150 miles further south and there I am surrounded by flash floods and impressive thunderstorms and showers. Welcome to Utah and get ready to prepare for anything.

We've had the opportunity of having a law enforcement officer escort us through a distribution system where warnings were



issued against violence and encouragement was given to be cooperative and work together. We were pressed to get emergency dam construction plans reviewed and approved before the rains came and the turtles started dating. We have worked hard to meet the demands of a multitude of varied weather conditions. Our staff has been great responding to the calls that have come in. I am proud of the efforts they have made. As we move forward, we are anticipating continuing variances in Utah's climate. We have a history of changing climate and will continue to see changes that will challenge our abilities to keep water moving to where it is needed most and to treat all users in an equitable manner.

Efforts were made this year to secure additional funding for the Navajo Settlement Agreement Fund but with the extreme demands on funding, the funds were not secured. Additional efforts will be made to obtain funding so that the settlement can be reached and projects completed to get dependable water resources to Navajo communities. The legislature this year passed several bills to assist in the processing and review of applications. They allowed water right deed addendums to serve as reports of conveyance to title updates; clarified that nonuse applications are not retroactive; amended some rulemaking authority of the State Engineer; eliminated the need for professional engineers and surveyors who stamp their work from having to get their signatures notarized; clarified when forfeiture periods start for those rights involved in an adjudication; required wholesale electrical cooperatives to supply information on extension requests past the 50-year time period; removed the proof requirements on fixed-time applications; allowed areas to be closed to diligence claims as part of a general determination of rights.

In addition, the legislature had significant discussions on how to address concerns that have arisen in the Supreme Court decisions of Jensen v Jones and Big Ditch v Salt Lake City cases. Although significantly discussed, no resolution was reached as to the best solution to address the concerns. I'm sure discussions will have to continue unless fatigue overtakes everyone involved. Discussions were also held on strengthening shareholder rights in a mutual irrigation company. No resolution was reached, but significant interest was expressed which assuredly will continue in the future.

The Executive Water Task Force has continued to make recommendations for statute improvements to assist us in the administration of Utah's water. In the Task Force, Water Development Commission, and Water Coalition there are some great minds at work trying to help refine Utah water law. I applaud their efforts and encourage them to continue to keep direction given in line with protecting water users' rights to use water and the state engineer's responsibility to secure the equitable apportionment and distribution of the waters of the state through proper measurement, appropriation, apportionment, and distribution of those waters by maintaining his "qatekeeper" role.

Financials

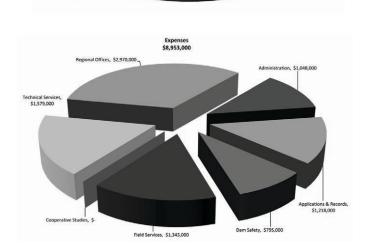
Fiscal Year Ending June 30, 2013 (Unaudited)

Dedicated Credits

18%

82%

Revenue \$9,568,000 Federal Funds 0%



Non-Lapsing Funds

General Fund	\$465,000
Dedicated Credit	\$150,000
Total	\$615,000

2012-2013 Highlights

- Seven pieces of water legislation were enacted which will help clarify water right processes.
- Governor Gary Herbert after consultation with local residents and leaders notified Nevada, Utah would not sign the negotiated Snake Valley Water Management Agreement.
- North Jordan Canal failed in Murray damaging three homes.
- State Engineer Kent Jones was appointed and confirmed by Senate for a four year term.
- A Federal Team was formed to participate in negotiations to settle federal reserved water right claims for the Navajo Nation in Utah.



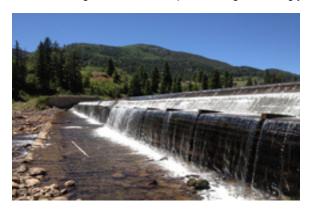
- Obtained a decree on Harmony Park Proposed Determination (Book 57-2).
- Resolved eleven Objections to Various Proposed Determinations
- Licensed ten new well drillers, 67 new drill rig operators, nine new pump installers, and six new pump rig operators.
 Currently the Division of Water Rights licenses and regulates 180 well drillers and pump installers and 210 drill/pump rig operators.
- Implemented new pump installation rules for licensing and regulation.
- Groundwater Management Plan was adopted for the Beryl Enterprise area.
- Miller Flat Dam was rehabilitated.



- Modifications to the Northern Utah Valley and Cedar Valley (Utah County) Groundwater Management Plans were proposed.
- Hydrogeological studies were commenced in the Parowan, Pine, Wah Wah, and Goshen Valleys.



- Construction of Adobe Wash Dam was completed and reservoir filled.
- A flood control structure on Tuachan Wash built in Ivins City.
- The Santa Clara flood control dam failed during heavy rains. A replacement dam meeting current safety standards has been designed, constructed, and returned to operation.
- Rehabilitation of Manderfield, Fairview Lake, and Kaysville dams have begun and will be completed during the coming year.



Action on applications in FY2013 was as follows:

Filed 446	Action 441	Type
		Applications to Appropriate
880	941	Change Applications
55	78	Exchange Applications
285	274	Nonuse Applications
1513	1417	Extension Requests
754	937	Certificates of Beneficial Use
346	306	Stream Alterations
2729	2854	Reports of Conveyance
1133	1133	Deed Addendums Processed
291	291	Dam Safety Inspections
29	4	Enforcement Referrals
8461	8672	TOTALS

Services and Functions

Water Right Applications

Process water right applications and maintain permanent records for all water rights in state. Assist the public to access water right information and complete application forms required by the agency.

Distribution and Measurement of Water

Oversee water commissioners and provide support where the agency is directly involved in the daily distribution of water among water right holders.

Adjudication

Present to the district court a proposed determination of water rights within hydrologic areas of the state where such investigations have been ordered by the court and obtain an adjudication order decreeing those water rights.

Dam Safety

Physically inspect and monitor operation of public and private dams, approve new dam construction, consult and approve dam upgrades and intervene in emergencies. Inspections and monitoring efforts are based on each dam's hazard rating for potential loss of life and property.

Stream Channel Alterations

Process permits to alter the banks or beds of natural streams under terms of the Utah Code and a general permit from the US Army Corps of Engineers.

Geothermal

Process permits to use geothermal resources in the state. Inspect facilities and monitor pressure tests.

Well Drilling Regulations and Licensing

Oversee licensing and regulation of water well drillers in the state.

Studies and Technical Services

Collect water resources data for surface, groundwater and use of water throughout the state. Perform studies to determine water availability and management alternatives. Support the integration of data automation technology in operations of the agency.

Enforcement

Administer the division's water rights, dam safety and stream alteration enforcement program as authorized by statute and administrative rule. Investigate violations of Utah water right law and initiate actions which encourage compliance.

Regional Offices

NORTHERN REGIONAL OFFICE Will Atkin, Regional Engineer 1780 N. Research Parkway, Suite 104 North Logan, UT 84341 435-752-8755 willatkin@utah.gov

WEBER/WESTERN REGIONAL OFFICE Ross Hansen, Regional Engineer 1594 W. North Temple, Suite 220 PO Box 146300 Salt Lake City, UT 84114-6300 801-538-7240 rosshansen@utah.gov

UTAH LAKE/JORDAN RIVER REGIONAL OFFICE
Teresa Wilhelmsen, Regional Engineer
1594 W. North Temple, Suite 220
PO Box 146300
Salt Lake City, UT 84114-6300
801-538-7240
teresawilhelmsen@utah.gov

SOUTHERN REGIONAL OFFICE Kirk Forbush, Regional Engineer 130 N. Main Street PO Box 664 Richfield, UT 84701-0664 435-896-4429 kirkforbush@utah.gov

SOUTHWESTERN REGIONAL OFFICE
Kurt Vest, Regional Engineer
585 N. Main Street, Suite 1
PO Box 506
Cedar City, UT 84721-0506
435-586-4231
kurtvest@utah.gov

SOUTHEASTERN REGIONAL OFFICE Marc Stilson, Regional Engineer 319 N. Carbonville Road PO Box 718 Price, UT 84501 435-613-3750 marcstilson@utah.gov

> EASTERN REGIONAL OFFICE Bob Leake, Regional Engineer 318 North Vernal Avenue Vernal, UT 84078-2126 435-781-5327 bobleake@utah.gov

Utah Division of Wildlife Resources (UDWR)



Mission Statement:

"The Division of Wildlife Resources serves the people of Utah as trustee and guardian of the state's wildlife."



Utah's elk populations are doing well. In May 2013, the Utah Wildlife Board approved more than 30,000 bull elk permits and nearly 18,000 cow elk permits.

Photo: Ron Stewart, UDWR

Utah Division of Wildlife Resources

1594 West North Temple, Suite 2110 PO Box 146301 Salt Lake City, Utah 84114-6301 801-538-4700 801-533-4709 (fax) www.wildlife.utah.gov



L to R: Dean Mitchell, Mike Fowlks, Robin Cahoon, Thu Vo-Wood, Mike Canning, Becky Johnson, Rory Reynolds, Gregory Sheehan

Executive Team

Gregory Sheehan — Director 801-538-4702 gregsheehan@utah.gov

Mike Fowlks — Deputy Director 801-538-4708 mikefowlks@utah.gov

Mike Canning — Assistant Director 801-538-4716 mikecanning@utah.gov

Rory Reynolds — Assistant Director 801-538-4734 roryreynolds@utah.gov

Robin Cahoon — Legislative Liaison 801-538-4707 robincahoon@utah.gov

Dean Mitchell — Conservation Outreach Section Chief 801-538-4816 deanmitchell@utah.gov

Becky Johnson — Administrative Secretary 801-538-4703 beckysjohnson@utah.gov

Thu Vo-Wood — Executive Secretary 801-538-4705 thuvo-wood@utah.gov

Division Director's Message

Near the end of 2012, Governor Gary Herbert asked me to serve as the new director of the Utah Division of Wildlife Resources. I was honored to accept the position and am working to make the division a stronger and more responsive agency.

During the past 10 months, I have had the opportunity to meet with hundreds of our employees as well as sportsmen, legislators, local governments, federal agencies, livestock interests and many others. I now have a better understanding



of how these groups and individuals would like to see wildlife managed in Utah.

Although different groups sometimes have conflicting priorities, there are many areas where we can find common ground. As a hunter, angler and general wildlife enthusiast, I believe we can continue to preserve and enhance wildlife populations throughout the state.

I know that Utah's sportsmen — myself included — want their children and grandchildren to enjoy a rich wildlife heritage. To make sure that happens, I have a few top priorities:

- · Helping our mule deer herds rebound
- · Recruiting our future hunters and anglers
- · Working more closely with our conservation partners
- Improving the public's confidence in the division
- · Protecting the wildlife in our state

Even before there were state wildlife agencies, there were hundreds of committed sportsmen's groups throughout the country. Today, we still rely on the efforts of sportsmen and sportswomen for funding, political support and recruitment efforts. I respect and thank all of you who are willing to step up and help. You are working hard to make a difference for Utah's wildlife. I don't claim to have answers to all the challenges that face our wildlife. I also understand that Utahns value wildlife for different reasons, and I will consider those interests as we develop new programs and opportunities for wildlife interaction.

My hope is that you can help me — and our many dedicated employees — as we tackle these issues in the years ahead. Working together, we can make more wildlife opportunity available for everyone.

Gregory Sheehan - Division Director



Utah is home to some big fish. Paul Thompson, the division's Northern Region aquatic manager, caught this huge tiger muskie at Newton Reservoir in June 2013. The fish was more than 45 inches long. Photo: UDWR

Utah Wildlife Board



Board members L to R: Michael King, John Bair, Gregory Sheehan, Jake Albrecht, Bill Fenimore, Calvin Crandall, Kirk Woodward and Steve Dalton.

Jake Albrecht, Chair Glenwood/Southern

Bill Fenimore, Vice Chair Farmington/Northern

John Bair Springville/Central

Calvin Crandall Springville/Central

Steve Dalton Teasdale/Southern

Michael King Price/Southeastern

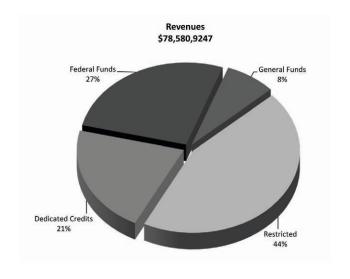
Kirk Woodward Vernal/Northeastern

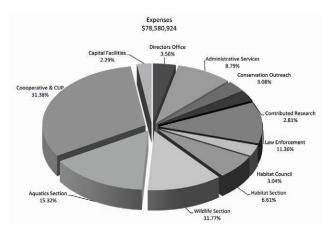
Gregory Sheehan, Executive Secretary

Financials

Fiscal Year Ending June 30, 2013 (Unaudited)

\$78,580,924





Habitat Council Spending by Program

Waterfowl	\$187,363.98
Upland Game	\$249,651.42
Big Game	\$963,369.65
Non-Game Terrestrial	\$10,311.34
Sportfish	\$842,760.91
Non-Game Fish	\$2,127.12
Total	\$2,255,584,42

2012-2013 Highlights

Administrative Services

- Division employees worked with more than 300 retail sales agents to help hunters and anglers obtain nearly 798,000 licenses and permits.
- In FY 2013, the division worked with partner Utah Interactive to deploy a new online purchasing application for license sales. This new system is much easier for customers to use. It also provides added functionality and operates with fewer outages.
- The division's onsite Department of Technology Services (DTS) personnel made great progress in their work on GIS programs. The division now has a GIS database that acts as the central repository for all GIS data. These centralized datasets can publish Web services on the new GIS server and can also support many new GIS applications.
- The division modified its existing systems in order to efficiently implement the new Predator Control Program. This solution has improved customer service without incurring additional development costs.



The division's new license-purchase portal gives customers an easy, user-friendly way to buy hunting and fishing licenses. Image: UDWR

Aquatics

- The division's fish culture program produced and stocked more than 1 million pounds of fish in FY 2013.
- In March 2013, the presence of adult quagga mussels was confirmed at Lake Powell. The division immediately required decontamination for all boats that departed the lake and entered Utah. In May 2013, the Utah Wildlife Board declared Lake Powell infested with quagga mussels. The division is now working closely with the National Park Service, the Bureau of Reclamation, the State of Arizona and many other partners to develop a control plan for Lake Powell and the Glen Canyon National Recreation Area.
- Division personnel completed in-depth creel surveys on the Weber River, Flaming Gorge and Cottonwood Reservoir in order to determine angler use and satisfaction.

Aquatics (cont.)

- The division's regional biologists restored fish habitat on the Upper Bear, Weber, Duchesne, Sevier and San Pitch rivers. They also worked
 - with U.S. Forest Service personnel to mitigate fire damage to Huntington Creek.
- Working with the division, the Blue Ribbon Fisheries Advisory Council funded \$450,000 in fisheries projects during FY 2013.
- During FY 2013, the division's native aquatics biologists documented the greatest extent of



The June sucker is an endangered fish found only in Utah Lake. In FY 2013, the division's biologists documented the greatest extent of June sucker upstream spawning migration in more than 50 years. Photo: Scott Root, UDWR

- June sucker upstream spawning migration in more than 50 years.
- The division's Aquatic Invasive Species program contracted with the Utah Division of State Parks and Recreation to help prevent the spread of invasive species in Utah's 22 waterbased state parks. The number of boaters contacted in each park increased in 2012, and boaters' compliance in using the required Decontamination Certification Form also increased dramatically.
- Personnel at the Great Salt Lake Ecosystem Program conducted or cooperated in an array of avian surveys and research on the Great Salt Lake. Personnel completed 93



The division's fish culture program produced and stocked more than 1 million pounds of fish in FY 2013. Many of those fish were rainbow trout. Photo: Scott Root, UDWR

- migratory bird surveys in FY 2013, recording 1,805,935 birds and 71 different species.
- In late June
 2013, the division
 hosted the National Fish
 Habitat Board meeting
 at the Utah State Capitol
 building in Salt Lake
 City. Director Sheehan
 provided the welcome
 address, and fisheries
 personnel showcased
 habitat-restoration efforts
 on the Weber River.

Conservation Outreach

In August 2012, the division launched a new Wildlife Recreation Program. The goal of this new program is to preserve the traditions of fishing, hunting, shooting and other wildlife-related recreation. The Wildlife Recreation Program incorporates the following programs, personnel and facilities: community fisheries, youth fishing clubs, Dedicated Hunters, volunteers, event coordination, Robert N. Hasenyager Great Salt Lake Nature Center, hunter education, shooting ranges, shooting sports and watchable wildlife.

 Near the end of FY 2013, the division provided nearly 4,000 day-old pheasant chicks to conservation organizations and individuals

throughout the state. Conservation outreach personnel worked to identify program participants and distribute chicks. Participants agreed to raise the chicks to adulthood and release them on public land before the 2013 pheasant season opener.

In FY 2013, the division started an Angling Activities Grants program that offered twenty \$1,000 grants to Utah organizations that provided hands-on learning opportunities for new anglers. Through this ongoing annual program, the division and its partners



In FY 2013, the division provided almost 4,000 day-old pheasant chicks to conservation organizations and individuals throughout the state. Participants have raised the chicks to adulthood and will release them on public land before the 2013 pheasant season opener.

Photo: Teresa Griffin. UDWR

hope to recruit and retain anglers of all ages.

 The division has been part of a partnership — called Wild Aware Utah (WAU) — that includes personnel from Hogle Zoo, the Wildlife Protection Society and Utah State University Extension Services. In FY 2013, WAU provided the public with brochures, door hangers, flyers, online information and other educational materials to help minimize conflicts between people and wildlife. To learn more, visit wildawareutah.org.



The division worked closely with the Department of Public Safety to launch a new educational website in early 2013. The site, watchfordeerutah.com, is focused on helping motorists avoid collisions with wildlife on Utah's roads.

- In January 2013, the division's communication personnel worked closely with the Utah Department of Public Safety to launch a new educational campaign and website to help Utah drivers avoid collisions with deer and other big game animals on state roadways. To learn more, visit watchfordeerutah.com.
- In September 2012, the division united with other state and federal land-management agencies to kick off the Ride On Designated Routes Utah campaign. The goal of the campaign, created by Tread Lightly!, is to educate outdoor recreationists who use motorized vehicles on Utah's public lands. Program partners share consistent statewide messages about the ethical and safe uses of off-highway vehicles. For more information, visit treadlightly.org/programs/ride-on/ride-on-utah.

Habitat

- In early 2013, the division completed one of the most significant land exchanges in its history. Partnering with the Utah Department of Transportation (UDOT), the School and Institutional Trust Lands Administration (SITLA) and the General Services Administration (GSA) of the federal government, the division exchanged 73 acres of low-value wildlife habitat in western Salt Lake County for 7,200 acres of critical wildlife habitat throughout the state. Much of the new acreage is adjacent to — or within — existing wildlife management areas and includes big game winter ranges, wetlands and riparian habitats.
- More than 300 active restoration projects were funded through the Habitat Council and Watershed Restoration Initiative (WRI) programs in FY 2013. Funding for all active projects from the division and its partners totaled over \$47 million. Forty-six of the approved projects focused on rehabilitating land and streams affected by wildfires.



In early October 2012, the division worked with other state and federal agencies to aerially reseed 25,000 acres of land burned in the Wood Hollow fire. Habitat managers used three planes, including the one in this photo, to drop a seed mix that produced grasses, flowering plants and shrubs.

Photo: Steve Gray, UDWR

- In FY 2013, the division worked with its many partners (federal, state, county, local, commercial and private) to rehabilitate almost 105,000 acres. The WRI was integral in these partnerships and provided contracting, seed and cultural-clearance support as needed. The division's Great Basin Research Center and seed warehouse responded quickly to the heavy fire season by mixing and distributing nearly 1.4 million pounds of seed purchased by the state and another 382,000 pounds of seed provided by cooperating agencies and groups. Total funding for this effort exceeded \$17.5 million.
- To help meet the requirements listed in the Conservation Plan for Greater Sage-Grouse in Utah, the division's habitat biologists began tracking permanent disturbances within sage-grouse management areas. The division's GIS manager provided essential technical support to Governor Herbert's advisory team.
- A six-year study to determine which wildlife crossings are most effective was completed at the end of FY 2013. The division partnered on this effort with Utah State University, UDOT and numerous conservation organizations. The study has helped biologists and engineers make effective decisions when addressing highway impacts.

Law Enforcement

 Conservation officers spent a substantial amount of time protecting Utah's wintering mule deer populations in 2012– 2013. Officers contacted 6,174 individuals while patrolling

winter habitat between Nov. 1, 2012 and March 31, 2013. This was the third year officers prioritized this effort, and documented illegal mule deer kills have decreased by 35 percent.

 Several highprofile big game cases were adjudicated in FY 2013. Two unrelated cases in Salt Lake County involved illegal activities with aspects of



Conservation Officer Hollie Riddle and Sergeant Paul Davis display a portion of the evidence seized during a recent high-profile investigation. In December 2012, the primary suspect pleaded guilty to four felony counts of Wanton Destruction of Protected Wildlife. He was sentenced to 30 days in jail and ordered to pay restitution in the amount of \$25,960. The court suspended his hunting privileges for a period of 50 years. Photo: UDWR

commercialization. The individuals convicted in these cases were assessed more than \$80,000 in fines and restitution, while collectively losing their wildlife license privileges for more than 150 years.

During the 2013 boating season, the division placed more officers at check stations in southern Utah to prevent the spread of invasive quagga and zebra mussels. These check stations were strategically placed along major travel corridors, including the point-of-entry station on I-15 and also along highway 89.

- Division officers have responded to an increasing number of calls about illegal exotic animals, seizing several vipers and alligators in 2013. The cause of this increase is unknown, but the division is working to improve its holding facilities for such creatures.
- The electronic management system that officers use to log their cases and daily activities has improved efficiency and allowed more time for officers to conduct field operations. All citations the officers issue are now filed electronically with the state court system.
- The division has been working to fill nearly a dozen vacancies in conservation officer districts. Two new officers were recently assigned to districts in Duchesne and Emery counties. Five new recruits will start in FY 2014. The division will continue searching for the very best candidates to fill open district positions.

Wildlife

For almost 20 years, Utah's biologists, researchers, land managers and local working groups have been working to protect and conserve the greater sagegrouse. In 2012, Governor Gary Herbert formed a statewide advisory team to provide input on a plan to conserve greater sage-grouse and prevent a threatened or endangered listing decision under the Endangered Species Act. Division biologists participated in the working group and assisted in



Utah's youth fishing clubs are now part of the division's new Wildlife Recreation Program. The goal of this program is to preserve the traditions of fishing, hunting, shooting and other wildlife-related recreation. Photo: UDWR

the development of the Conservation Plan for Greater Sage-Grouse in Utah, which was finalized in April 2013.

Utah's Mule Deer Protection Act went into effect in July 2012. Its primary goal is to remove coyotes from areas where they are preying on mule deer. The legislation set aside \$500,000 from the Utah General Fund to pay people who killed coyotes in Utah. To process those payments, the division created the Predator Control Program and began accepting coyotes for payment on Sept. 3, 2012. During the first year of the program, participants turned in 7,160 coyotes for a total of \$380,950. It is difficult to calculate exactly how many more coyotes were killed because of the new program, but based on survey data, it was probably about 3,000–4,800 additional coyotes.

 Almost 790 wild turkeys were captured and released in suitable habitat during the winter of 2012–2013. These birds should establish new populations and provide additional turkey

hunting opportunities in Utah.

In early 2013, the division's wildlife biologists began two new research studies: one on mule deer and one on moose. The mule deer study is designed to determine if the division can transplant deer from areas showing habitat damage to areas with more



During the winter of 2012-2013, division personnel captured almost 790 wild turkeys and released them in suitable habitat.

Photo: Scott Root, UDWR

abundant habitat. The moose study is focused on better



In February 2013, the division moved bighorn sheep from the Moab area to San Juan County. The animals were relocated to prevent them from coming into contact with domestic sheep and goats.

Photo: Brent Stettler, UDWR

- understanding adult survival, calf production and survival, calf twinning rates, pregnancy rates and, when possible, cause of death.
- The division conducted three bighorn sheep transplants to the Kaiparowits, Zion, and San Juan units to help expand and bolster existing populations.
- In spring 2013, division biologists worked with employees from the Division of State Parks and Recreation to transplant sharp-tailed grouse from northern Utah to Antelope Island State Park. This was the fourth year of a multi-year

effort to establish a nursery population for future statewide transplants. A newly formed lek (breeding ground) on Antelope Island was confirmed during this year's effort.

Services and Functions

Certificates of Registration

Issues licenses and certificates of registration to falconers, private pond owners and people who want to own exotic pets.

Community Fisheries Program

Partners with local governments to provide urban and community fishing opportunities for Utah youth and families.

Dedicated Hunter Program

Provides additional hunting opportunities for Utah deer hunters who perform volunteer service benefiting wildlife.

Fisheries Experiment Station

Monitors Utah's wild fish populations and the division's fish hatcheries. Provides hatcheries with disease assessment and treatments

Great Basin Research Center and Seed Warehouse

Conducts rangeland-rehabilitation research. Also stores, mixes and distributes seed for habitat-restoration projects.

Hatcheries

Owns and operates 12 state fish hatcheries.

Hunter Education

Trains young adults in the safe handling of firearms and is a prerequisite to purchasing a hunting license. The Lee Kay Center for Hunter Education (801-972-1326) and the Cache Valley Hunter Education Center (435-753-4600) provide Hunter Education courses and public shooting ranges.

Licenses

Sells hunting and fishing licenses.

Natural Heritage Program

Identifies and monitors sensitive plant and animal species, and maintains a database for making natural resource decisions.

Publications

Creates publications that provide news and information to constituents. Also publishes guidebooks that summarize hunting, fishing and trapping regulations.

Volunteer Program

Supplements division programs while providing Utah's public an opportunity for hands-on experiences with wildlife biology, habitat restoration and education.

Website (wildlife.utah.gov)

Provides many online services and tools. Customers can buy hunting and fishing licenses, and use Web tools to obtain a wealth of information about Utah's wildlife.

Regional Offices

CENTRAL REGION (SPRINGVILLE) John Fairchild, Regional Supervisor 801-491-5678

NORTHEASTERN REGION (VERNAL) Boyde Blackwell, Regional Supervisor 435-781-9453

NORTHERN REGION (OGDEN) Justin Dolling, Regional Supervisor 801-476-2740

SOUTHEASTERN REGION (PRICE) Chris Wood, Regional Supervisor 435-613-3700

SOUTHERN REGION (CEDAR CITY) Kevin Bunnell, Regional Supervisor 435-865-6100

Regional Advisory Councils

CENTRAL REGION Gary Nielson, Chair gary.nielson@juab.k12.ut.us

NORTHEASTERN REGION Wayne McAllister, Chair wmcallister@easilink.com

NORTHERN REGION Robert Byrnes, Chair rwb62@comcast.net

SOUTHEASTERN REGION Kevin Albrecht, Chair kalbrecht@fs.fed.us

SOUTHERN REGION Dave Black, Chair daveb@racivil.com

Utah Geological Survey (UGS)



Mission Statement

"Utah Geological Survey provides timely scientific information about Utah's geologic environment, resources and hazards."



Utah Geological Survey geologist Craig Morgan working in the San Rafael Swell to assess the potential for carbon dioxide sequestration

Utah Geological Survey

1594 West North Temple, Suite 3110 PO Box 146100 Salt Lake City, Utah 84114-6100 801-537-3300 801-537-3400 (fax) www.geology.utah.gov



L to R: Dianne Davis, Kimm Harty, Rick Allis

Executive Team

Rick Allis - State Geologist/Director 801-537-3301 rickallis@utah.gov

Kimm Harty - Deputy Director/Legislative Liaison 801-537-3313 kimmharty@utah.gov

Dianne Davis - Administrative Secretary 801-537-3305 diannedavis@utah.gov

Division Director's Message

The Utah Geological Survey (UGS) strives to make Utahns

more aware of geological information, and to see that information is used in wise landuse decisions. In recent years we have greatly increased the volume of geological information accessible through our website. Web statistics show that both the number of visits and the number of unique visitors are increasing at about 20 percent per year. Based on the pages visited and data downloads, our users range from consultants and the private sector, to federal, state and



local governments, and to school children doing class projects. As we look forward, the UGS will continue to add information to the website, and also plans to develop applications that will make geologic information more accessible to mobile devices.

Rick Allis, State Geologist/Division Director

Board of the Utah Geological Survey



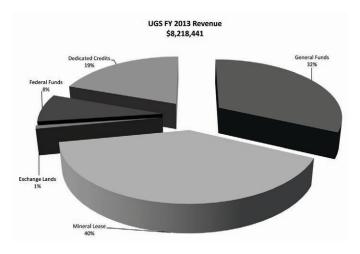
Kneeling left to right: Tom Tripp, Mark Bunnell, Pete Kilbourne, Bill Loughlin. Standing left to right: Marc Eckels, Sunny Dent (Ken Puchlik missing)

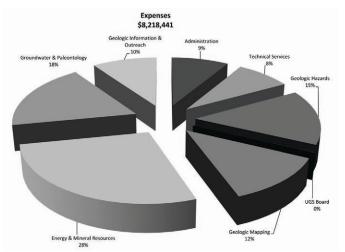
Mark D. Bunnell, Chair - Minerals (Coal) Tom Tripp, Vice Chair - Minerals (Metals) Bill Loughlin, - Geology/Engineering Kenneth Puchlik, - Minerals (Industrial) Pete Kilbourne, - Scientific Interests Sunny Dent, - Public-at-large Marc Eckels, - Minerals (Hydrocarbons) Kevin Carter, Ex-officio (Represented by Tom Faddies)

Financials

Fiscal Year Ending June 30, 2013

(Unaudited)





2012-2013 Highlights

Ground Water and Paleontology Program

- Continued to maintain and evaluate data collected from monitoring-well and spring-flow gauging networks in the Snake Valley area of Utah's west desert, and updated Groundwater data portal (http://geology.utah.gov/databases/groundwater/ projects.php) to provide public access to the data.
- Evaluated groundwater conditions in the Malad River basin, Box Elder County, to help facilitate groundwater management.
- Assessed the potential for Ashely Springs, Uintah County, to be contaminated from a proposed phosphate mine.
- Inventoried springs and groundwater dependent ecosystems
 - in the Manti-La Sal National Forest in Sanpete County
- Established baseline wetland conditions and maintained a shallow groundwater monitoring-network of 76 piezometers in Snake Valley, Millard County.
- Continued the excavation, preparation, and scientific description of several new species of dinosaurs from sites in Grand County.
- Maintained a digital paleontological locality data base in partnership with the l



Volunteer works with UGS paleontologists removing overburden to expose dinosaur fossils at Tibbet Springs Quarry in Grand Staircase-Escalante National Monument

partnership with the U.S. Bureau of Land Management.

Energy and Minerals Program

- Continued multi-year assessments of Utah's geothermal resources.
- Continued multi-year studies of gas potential of the Mancos Shale in the Uinta Basin and regional carbon dioxide sequestration potential of the Weber, White Rim, and Entrada Sandstones.



A UGS geologist works on a frac-sand sampling project near St. George

- Continued a project to make data on deep coal deposits available to the National Coal Resource Data System.
- Began research on 1) shale oil plays in Utah, and 2) improving understanding of water produced/used by natural gas operations in Utah.
- Began study of frac-sand potential in Utah.
- Continued studies of the potash resources of the Paradox Basin, Utah.
- Provided Governor's Office of Planning & Budget estimates of future revenue from critical energy and mineral production in Utah.

Geologic Hazards Program

- Continued mapping geologic hazards in western Salt Lake Valley and northern Utah Valley as part of our on-going Geologic Hazards Mapping Initiative.
- Completed landslide inventory mapping for the Seeley Fire, Sixmile, Ephraim,

and Manti areas on the Wasatch Plateau, and continue mapping in the Big Bear area.

worked closely with the U.S. Geological Survey and others to evaluate active faults in Utah, including the Washington fault, the Salt Lake City and Nephi segments of the Wasatch fault, and the West Valley fault zone.



This boulder crashed into a St. George home on January 19, 2013, severely injuring one occupant. The home and the surrounding subdivision was constructed prior to published UGS geologic hazard maps that show the area is in a high rock fall hazard zone.

- Co-sponsored the Working Group on Utah Earthquake Probabilities that is developing an earthquake forecast for the Wasatch Front.
- Continued annual Utah Earthquake Working Group meetings to review research activities and develop consensus on results, reevaluate long-term plans for producing earthquake hazard maps, and develop partnerships for investigations.
- Responded to various geologic emergency responses for local governments, including rock fall in St. George and along State Route 14, and numerous landslides across the state.
- Responded to local governments' inquiries regarding geologic hazards and landslide movement.
- Continued geologic data preservation by archiving older geologic maps, engineering geology reports, and aerial photographs of Utah.

Mapping Geology Program

- Published 6 geologic maps of parts of Utah and advanced several multi-year maps.
- Completed our largest cooperative mapping project to date.
 The 4-year Grouse Creek 30'x60' quadrangle mapping project involved geologists and geophysicists from the UGS, USGS, and three universities.
- Archived and prepared digital copies of 225 older geologic

maps that were in danger of disappearing and posted about 300 maps to the internet for public use.

- Received federal cost-share contracts to conduct geologic mapping in the Tooele, Duchesne, Loa, Salina, and north part of Salt Lake City areas of the state.
- Produced three large GIS databases of new



UGS, USGS, and university geologists use maps, charts, and cross sections to explain to the local community, federal, state and local land managers, interested geologists, and others about the exceedingly complex geology of the Grouse Creek/Raft River Mountains areas as unraveled during a 4-year cooperative mapping project.

geologic mapping in the Panguitch area, Rush Valley area, and Grouse Creek areas of the state. About two-thirds of the state now has advanced GIS geologic map data available.

Geologic Information and Outreach Program

- Tracked 3,900 public inquiries that were answered by the UGS.
- Held activities for 650 elementary students during Earth

Science Week.

- Loaned out 170 educational teaching kits
- Instructed five teacher workshops



Students learn about stream erosion and deposition during Earth Science Week.

Services and Functions

Utah Core Research Center

The center, which is located in a separate building, serves as a repository and laboratory for Utah well cutting and core, petroleum, coal and geologic samples used for public education, and industry and state resource research. The center provides core photography, slabbing, and plug preparation, and sample loan services, as well as data searches and workshops.

Geologic-Hazard Assistance

The Geologic Hazards Program assists governments in responding to geologic-hazard emergencies, reviews geologic-hazard reports for school districts, investigates geologic hazards, and prepares geologic-hazards maps for use by local governments, consultants, and the public.

Natural Resources Map & Bookstore

This is the only store in Utah that maintains an inventory of topographic maps for the entire state. The store also offers a selection of publications and maps on Utah geology and other natural-resource topics.

Water Resource/Environmental Evaluations

The Groundwater Section evaluates ground-water resources and protects drinking water supplies by investigating environmental impacts of waste disposal and storage and treatment facilities for state, federal, local governments and agencies.

Public Inquiry

The Geologic Information and Outreach Program provides information on Utah geology and geologic issues to governments, industry, education, and the general public.

Energy and Mineral Evaluations

Geologists specializing in Utah's various energy and minerals investigate and provide energy and mineral resource information on county, state or federal lands to local, state and federal agencies.

Paleontological Services

The Paleontological Section evaluates paleontological sites, excavates critical fossils in danger of destruction, and issues paleontological excavation permits.

UGS Regional Office

Southern Utah Regional Office

William Lund 88 East Fiddler Canyon Road, Suite C Cedar City, UT 435-865-9041 billlund@utah.gov

Department of Natural Resources Monday-Friday 8:00 a.m. - 5:00 p.m.

(closed on legal holidays)

On-line resources:

Boating Safety:

www.stateparks.utah.gov/boating

Camping Reservations:

www.stateparks.utah.gov/reservations

Earthquake Awareness:

www.geology.utah.gov/utahgeo/hazards/index.htm

Employment::

www.hr.utah.gov/adm/admhr.htm

Hunter Safety:

www.wildlife.utah.gov/huntereducation

Hunting and Fishing Licenses:

www.secre.utah.gov/hflo2/hflo

Map and Bookstore:

www.mapstore.utah.gov

Mining Permits:

www.ogm.utah.gov/mining/default.htm

Off-Highway Vehicles:

www.stateparks.utah.gov/ohv

Oil Drilling Permits:

www.oilgas.ogm.utah.gov/Quick Refs/gref permits.htm

Water Conservation:

www.conservewater.utah.gov

Water Rights Records:

www.waterrights.utah.gov/wrinfo/query.asp

The Utah Department of Natural Resources receives federal aid and prohibits discrimination on the basis of race, color, sex, age, national origin or disbility.

For information or complaints regarding discrimination, contact:

Executive Director

Utah Department of Natural Resources

PO Box 145610

Salt Lake City, Utah 84114-5610

Or contact:

Equal Employment Opportunity Commission 1801 L Street, NW

Washington DC 20507-0001

PO Box 145610 Salt Lake City, Utah 84114-5610 **Utah Department of Natural Resources** STANDARD
US POSTAGE PAID
Salt Lake City, UT
Permit No. 4621 PRESORTED